

Annual Report

ON THE

PUBLIC HEALTH OF MIRFIELD,

FOR THE YEAR 1913,

BY

LESLIE J. MILNE,

M.D., C.M., M.A., (Univ. Abdn.),

Fellow of the Incorporated Society of Medical Officers
of Health,

Certifying Factory Surgeon, etc.

MEDICAL OFFICER OF HEALTH

FOR MIRFIELD.



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G. E. PECKETT DAVIS, M.B.

The Ninth Annual Report of the Medical Officer of Health for Mirfield.



TO THE CHAIRMAN AND MEMBERS OF THE URBAN
DISTRICT COUNCIL.

GENTLEMEN,

I have very great pleasure in laying before you my report on the Health and Sanitary condition of the district for the year ending, 31st December, 1913.

This is the Ninth Annual Report I have had the honour of submitting, and I think we may congratulate ourselves on considerable progress. Several very important changes have been introduced during the year. The National Insurance Act came into force on 15th January, 1913, and a large proportion of the working class population has now the advantage of free medical attendance, in addition to obtaining sickness and disablement benefits. The sickness benefit is a payment of 10/- per week for men, 7/6 per week for women, up to 26 weeks, during the period in which the insured person is incapable of work, through sickness or other disablement. The insured person must have paid at least 26 contributions to become entitled to this benefit, and it commences on the fourth day of illness. The disablement benefit does not come into force, until the person has paid at least 104 contributions ; and if he has drawn 26 weeks sick pay, and is still unfit for work he can then draw 5/- a week.

Now a days the doctor is consulted for trivial ailments, and it is sometimes easier to write a prescription for a bottle of medicine than to point out that

“ Of all the ills that suffering flesh endures,
The larger fraction, Liberal Nature cures,
Of those remaining, 'tis the smaller part
Yields to the efforts of judicious Art,
But Simple Kindness sitting by the bed,
.....
Wins back more sufferers with Her word and smile.
Than all the trumpery in the druggist's pile.”

I sometimes think that far too much medicine is consumed, but the Yorkshireman likes his physic, and would often be disappointed if he were sent away without.

Another important change is the Compulsory Notification of other tubercular diseases, in addition to that of pulmonary tuberculosis, which became notifiable in the previous year, 1912. Sanatorium accommodation is now available in connection with the National Insurance Act.

Road improvements have been effected during the year at Kitson Hill Road, Doctor Lane, and Water Royd Lane, and the localities are greatly benefited thereby.

The Council has purchased land for widening Flash Lane to a uniform width of 26 ft., and for widening the bottom of Northorpe Lane and improving the entrance to Crossley Lane. This is a very desirable improvement as five dwellings which are not of a very desirable class will have to be demolished.

In order that each one of my reports should be complete in itself, it is necessary to repeat from year to year some of the paragraphs.

A. Natural and Social Conditions of the District.

(1) Physical Features and General Character of the District.

Mirfield is a very ancient Township, and is referred to in the Domesday Book as Mirefelt. It lies between Dewsbury and Huddersfield, 3 miles from the former, and 5 miles from the latter.

There are four railway stations in Mirfield, and three others within a radius of 2 miles, so that excellent railway facilities are offered to residents.

The Urban District of Mirfield consists of a section of about 3 miles of the Calder Valley running from West to East. About $\frac{3}{4}$ of the district has a natural drainage to the River Calder, and the remaining $\frac{1}{4}$ which lies on the north-east side (Northorpe Ward), forms part of the Spen Valley water-shed, with a drainage to the Spen Beck, a tributary of the Calder.

On the south side of the Calder the land rises rather steeply to a height of 600 feet, and the land on the north side rises to a height of 426 feet, the slope being more gradual. The bed of the Calder is about 150 feet above Ordnance Datum.

Geographically the district rests on the Lower Coal Measures which form part of the Upper Carboniferous System. The chief seams of coal worked are, in their order of formation, the following viz :—Wheatley Lime, Blocking Bed, Beeston Bed, Black Bed, Better Bed. The area is very faulted, the faults running chiefly south-east. The dip of the measures is south-east by east, about 1 in 24.

It cannot be said that the Coal Measures form ideal sites for building purposes, as the sub-soil, being chiefly clays and shales, is impervious, and holds the water on the surface until evaporated. The low-lying land on either side of the river is Alluvium on River Terraces. Stone has been quarried in several parts of the district, but the quality is not good.

The greatest length of the district from east to west is about $2\frac{5}{8}$ miles, and from north to south about 3 miles.

Although the population of Mirfield is ^{11,784,}~~11,748~~ still the district presents to a great extent a rural appearance.

(2)—The Social Conditions.

Mirfield comprises 3,394 acres with about 2,850 inhabited houses. The rateable value, as stated in the valuation list is £56,246 os. od., and the assessable value £44,643 10s. od. The General District Rate is 4s. 4d. For Poor Rate purposes the gross estimated rental is £70,803 os. od., and the assessable value £54,747 7s. 6d. The Poor Rate is 4s. od.

A penny in the £ on the General District Rate realises £186.

Census returns have not been available as to occupations and overcrowding.

Electric light is supplied by the Council to 174 consumers, and the total demand was equal to 9165—30 Watt Lamps including 97 h.p. in Motors, and 15 h.p. for Heating and Ventilating purposes.

The chief manufactures of the district are Heavy Woollen Goods, Blankets, Cloth, Yarns, Card Clothing, Maltings, Cotton Spinning and Doubling. Coal is also obtained in the district, and there are several collieries just outside our boundaries.

The various mills and workshops find occupation for a large proportion of the working population, while many men and lads work in the pits, and the Hopton district is largely occupied by men who work on the railway.

I think the present method of assessing dwellings is to some extent defeating the object we advocate, of trying to raise the standard of life by better housing and brighter surroundings. When a man removes into a better house in a healthier district, he has to pay more rates, and the water-rate is increased correspondingly. And if he indulges in the luxury of a bath, another charge of 12/- a year is added. Instead of encouraging families to improve their surroundings we discourage them by additional taxation. Sometimes I fear this has to be met by reducing the food and clothing bills, or by limiting the number of children. Surely this is not a sound principle. I think the charge for baths might be abolished, or at any rate, reduced say to 2/6. The present price of 12/- as charged in Mirfield is not an inducement to fix baths in artisans' dwellings ; as long as trade is good, the additional taxation may be met, but when slack times come, the shoe begins to pinch, and it may end in the family returning to a street with less salubrious environment.

Miners' Nystagmus is becoming a very common disease amongst colliers, and is now notifiable under the Workman's Compensation Act whether the symptom of oscillation of the eye-balls be present or not. Several cases came under observation during the year, and a number of compensation certificates were granted.

163 patients were treated in the Memorial Hospital for general medical and surgical diseases, 86 surgical operations were performed. The majority were treated gratuitously, but many paid the small fee of 1/- per day,—children 6d ; and some private patients were also treated. Persons insured under the National Insurance Act, are expected to pay, if others are not dependent upon them.

The Fever Hospital at Crossley affords ample accommodation for treatment of infectious diseases, and 31 cases were treated therein, in addition to 4 "suspects."

There is a Reformatory School in Mirfield, where over 110 boys are usually in residence, and excellent new buildings are in process of erection.

The number of paupers who received out-door relief was as follows :—

	No. of Cases.	No. of Persons.	Amount.
March	40	78	£108 14s. 1d.
Sept.	40	79	£181 18s. 9d.
Non-settled Poor.			
March	1	5	£13 6s. od.
Sept.	2	6	£6 15s. od.

The number of people in receipt of Old Age Pensions was about 250.

Five Mirfield residents were removed to Storthes Hall Asylum.

Mirfield Council favours the Daylight Saving Bill, and thinks it would give increased physical, mental, and social benefits to the inhabitants.

Means taken for the prevention of Infectious Diseases.

Cases of Scarlet Fever, Diphtheria, Typhoid Fever, and Small Pox, are removed to the Hospital (if possible) as soon as notified. The house is disinfected with formalin, and the children (if any) from that house are forbidden to go to school for a fortnight. Contacts are looked for, and teachers at school advised to notify any suspicious cases. Smoke test is frequently applied to drains in diphtheria cases. Schools are disinfected if necessary, and swabs are taken from throats of contacts in cases of diphtheria, and sent to Wakefield for bacteriological examination.

Water Supply.—Water is obtained from the Huddersfield Corporation.

Like all moorland water it has a slightly brownish colour and an acid reaction. Its acidity makes it liable to act upon lead pipes. The Huddersfield Corporation has now promised that all water supplied to Mirfield will be submitted to careful filtration, which should remove the colour, and assist in neutralizing the dangerous acid. It is also at times necessary to add varying quantities of carbonate of soda to the water in the reservoir, so as to neutralize the acid, and to obviate the risk of plumbo-solvent action. I strongly advise the use of a first-class filter, such as the Pasteur-Chamberland or the Berkefeld.

Now that we are rapidly converting privies to W.Cs. I think that we should ask the Huddersfield Corporation for a service reservoir, to hold a few days supply, in some high-lying part of the district, which would ensure a better supply of water in certain circumstances.

Rivers and Sewers.—Most of the houses in the district are now connected to the main sewers, although some discharge into cesspools, and some over land. The river Calder is not now greatly polluted by household sewage.

Drainage and Sewerage.—626 yards of 9 in. sewers, and 161 yards of 6 in. sewers, have been laid during the year, viz :—Kitson Hill Road, 9 in., 431 yards ; Slipper Lane, 9 in., 195 yards ; Mock Farm, 6 in., 115 yards ; Spring Place Mills, 6 in., 46 yards. Lengths of pipe drains with trapped inlets have been substituted for walled and covered surface-water drains in Greenside Road, Knowle Lane, Water Royd Lane, and Upper Row.

Sewage Disposal.—The Council's Sewage Farm is situated at Northorpe and consists of 33 acres of land. Sewage is treated by intermittent downward filtration and broad irrigation. About $\frac{2}{3}$ is discharged to a pumping station at Shepley Bridge, and pumped by means of electric power to a height of about 60 feet, where it joins the main outfall sewer and gravitates to the farm.

The electrically-driven pumping plant erected in 1907 was duplicated in January, 1912. The new pump has an increased capacity of 10,000 gallons per hour.

A great scheme of extension to sewage works, estimated to cost £3850, has been sanctioned by the Local Government Board, and already the caretaker's cottage and implement shed have been erected, and tenders are at the present time being invited for the construction of the tanks, &c. A full account of this scheme is given on pages 39 to 43 of this report.

Another Local Government Board enquiry was held at Brighouse in May, when the Clerk to the Mirfield Council requested the Inspector not to recommend the granting of leave to borrow money for extension of sewage works at Cooper Bridge, unless he was satisfied that the new works would not constitute a nuisance. Many Mirfield residents also entered protests, and a strong case was made out proving the nuisance from flies and stench. No reply has yet been received regarding the result of the enquiry.

Closet Accommodation.—Forty-two privies have been re-constructed during the year and converted into w.c.'s, whilst 13 additional closets were provided for old property, making a total of 55 new w.c.'s. There were also 44 w.c.'s constructed for new houses.

This only partially represents the work done during the year, for at least other 50 or 60 re-constructions have been arranged for, and most of them are nearly completed.

There are now 877 water closets in the district, 47 waste-water closets, 1134 privies with covered middens. I should be glad if the Council would consent to order all privies to be converted, for it is certain that the presence of foul smelling night-soil, often within a few feet of the house, is sufficient excuse for keeping windows closed, and thus ventilation is entirely neglected.

During the hot weather of last summer, particular attention was paid to the flushing of the sewers, and on several occasions when there was a minimum flow of sewage, liquid disinfectant was added to the water used for flushing.

I should like to see a great many more portable ash-bins, into which no vegetable matter should ever be put.

Stable manure should nowhere be permitted to lie, for it is a favourable breeding place for the house-fly, the carrier of many diseases.

The seven Webb's ventilating lamps still give very satisfactory results.

All the main roads have been tar-sprayed, and the most important of the district roads have had calcium chloride put down.

Scavenging.—7167 loads of Refuse were removed during the year, 6,224 to the tips, and 1,493 to the land, at a cost of £911 8s. 4d., this is an increase of £61 19s. 8d. on last year. Our men's wages have been increased by £56 3s. 0d., and Hopton Quarry tip was closed in June, so that all refuse had afterwards to be carted (even from Hopton) to the Taylor Hall Lane tip.

			£	s.	d.
Team labour cost	...	...	539	5	11
Manual labour...	.	...	309	13	11
Cost of Tip	...	...	62	14	0
Disinfectants	...	...	11	5	0
Cart Covers	...	...	3	7	6
Total			926	6	4
Less for removal of Trade Waste			14	18	0
			911	8	4

NUISANCE INSPECTION.

The following is a List of the Nuisances reported to the Council during the year :—

1. Insanitary condition of 22 cottages at bottom of Crossley Lane.—Repaired.
2. Wood Row, Jackroyd Lane, 9 cottages with insufficient closet accommodation.—Six w.c.'s provided.
3. Hopton Lane tip should be closed.—Closed end of June.
4. Warran's property, Jackroyd Lane, all privies to be done away with and w.c.'s substituted.
5. Pearce's property, Jackroyd Lane, insanitary privies.
6. Primitive Chapel, Jackroyd Lane, pail closet, insanitary.
7. Sewage has been frequently passed down top-water drains in Jackroyd Lane.—Tenants warned.
8. Scargill's Buildings, Philiproyd Terrace, insufficient privy accommodation, vegetable matter in ashpits.
9. House in Princes Street, unfit for human habitation.—Repaired.
10. Fish unfit for human food 3st. 9lb. It had been sent from a dealer in Huddersfield to a local fish and chip merchant—Destroyed.
11. Eight samples of milk sent for Examination and were condemned because of insufficient milk-fat.
12. Over-crowding—two cases at The Clough, and one case at Wellington Buildings.—Two removed and one got extra bedroom.
13. Ledgard Bridge Mills, privies should be done away with and w.c.'s substituted, 4 for females and 3 for males.
Ditto, insufficient urinal accommodation.—Being dealt with.
Difficulty in arranging easement with Railway Company.
14. Eastthorpe, top of Station Road, insufficient and insanitary privy accommodation.—Two new w.c.'s being provided.
15. Station Road, 2 privies with very low wet ashpit, which is too near dwelling.—In hands of contractor.
16. Oddfellows Lodge, New Scarboro,' 14 houses with only 2 w.c.'s and 4 privies and 2 wet ashpits. One ashpit is too near dwelling houses. Additional w.c.'s should be provided.—Work in hand.

17. Offensive smell from Ledgard Mills seak plant.—Nuisance minimised.
18. Over-crowding at cottage near the Elbow.—Removed.
19. Calder Road & Marshall Street property—insufficient closets, pigs kept within 20 ft. of dwellings, and hens in cellars under the cottages, so that the inhabitants don't require a knocker-up.—Notice served.
20. House in Savile Square, N. Scarboro'—filthy and unfit for human habitation.—Vacated and cleaned.
21. Over-crowding at Towngate.
22. South Parade, Nab Lane, insufficient closet accommodation.—Being dealt with.
23. Old Grammar School, privies should be converted.—Being dealt with.
24. Clough, Battieford, 2 privies should be converted.—Being dealt with.
25. Barker's property at Elbow, 13 privies to be done away with and 16 w.c.'s substituted.—Work in hand.
26. New Tanhouse, 6 privies should be replaced by 7 w.c.'s.
27. Back Knowle Terrace, 4 privies to be replaced by w.c.'s.
28. A closet at Northorpe in very insanitary state.—Altered.
29. About 150 other nuisances were reported and dealt with after verbal notice.

FOOD.

(a) **Milk Supply.**—Eighteen samples of milk were analysed during the year, and all found to be wholesome. Three samples were found to contain only 2·46 % milk fat, *i.e.*, 82·0 % of the minimum proportion of fat (3 %) natural to genuine milk.

(b) **Other Foods.**—51 lbs of fish were surrendered, and destroyed as unfit for human food.

HOUSING.

The following inspections were made under section 17 of the 1909 Act.

DEFAULT OF THE OCCUPIERS.

No. of dirty houses	{	floors	...	...	...	6
		walls	...	...	...	3
		ceilings	...	...	...	8

DEFAULT OF THE OWNERS.

No. of damp houses	{	ceilings	...	...	...	16	
		walls	...	...	...	18	
		floors	...	...	...	9	
No. of houses with defective walls		...	...	...	14		
„	„	„	„	ceilings	..	...	12
„	„	„	badly ventilated rooms		...	...	22
„	„	„	defective slopstones		...	..	12
„	„	„	defective drains		...	...	16
„	„	„	defective rainwater pipes		...	...	5
„	„	„	defective eaves trough		...	...	4
„	leaking roofs		...	...	...	...	18
„	cellars without flags		...	...	...	...	11
„	houses without proper food-store		...	...	...	14	
„	„	with badly lighted rooms		...	...	2	
„	„	„	defective floors		...	...	11
„	„	„	leaking guttering		...	...	7

A special Housing and Town Planning Committee was appointed to consider the advisability of the erection of workmen's dwellings, and the Committee recommended a more drastic supervision of house property, with the intention of impressing upon all owners the decision of the Council to permit no undesirable houses to be occupied.

It was considered that it was not at present necessary to erect cottages with public money, as private enterprise seems to meet the demand. Visits of inspection were paid to Selby and elsewhere. New tenants can now insist that houses be put into a perfect sanitary condition before they enter, the implied covenant in every letting being that the house is fit for human habitation.

Six cases of over-crowding were investigated, and five have already been satisfactorily dealt with. But there is another form of overcrowding much more common and quite as injurious, which could easily be altered. Many large families when in the house, huddle themselves together, and spend all their time in the kitchen (which is often also used as a bedroom for the parents) even though they have another room at their disposal. The front room is kept for state occasions, and hardly ever used except as a passage from the kitchen to the staircase and bedrooms overhead.

A large number of new houses for the working classes have been erected during the year, in various parts of the district, and these all comply with the bye-laws.

MIDWIVES ACT.

No cases of Puerperal Fever were notified. It is well known that several women are acting as midwives, and attending confinements without any medical man, although they are not certified. I am bound to confess that there is not much difference between the certified and uncertified, for all are untrained.

VITAL STATISTICS.

Population.—The Census in 1911 showed that the population was 11,712, and I estimate the population for the year at 11,784.

Births.—237 births were registered during the year, 120 boys and 117 girls. This gives a birth-rate of 20·1 compared with 17·0 for the previous year.

The birth-rate for England and Wales was 23·9, and for England and Wales less the 241 towns, 22·2.

The births registered in the various quarters were 53, 69, 58 and 57.

There were 9 illegitimate births. I am informed by the Sextons of the various burial-grounds that 9 still-born children were buried with a doctor's or midwife's certificate.

Vital Statistics for the Year 1913.

ENGLAND AND WALES

Birth-rates and Death-rates, in the Year 1913 (Provisional Figures).

	Annual Rates per 1,000 Living.			Deaths under One Year to 1,000 Births.
	Births	Deaths.		
		Crude.	Cor-rected.*	
England and Wales ...	23.9	13.7	13.4	109
95 Great Towns including London	{ 25.1	14.3	14.7	116
146 Smaller Towns ...	23.9	12.8	13.0	112
England and Wales less the 241 Towns	{ 22.2	13.1	12.1	96
London	24.8	14.2	14.2	104
Mirfield... ..	20.1	11.9	12.6	88

* The standardized death-rates (formerly called corrected death-rates) are the rates which would have been recorded had the sex and age constitution of the populations of the several areas been identical with that of England and Wales as enumerated in 1901. A description of the method of standardizing these death-rates is to be found in the Registrar-General's Annual Report for 1911, p. xxix.

Deaths.—The number of deaths registered during the year was 140, viz :—69 males and 71 females. Seven of these were “non-residents” [Liversedge 5 (in Crossley Hospital) Huddersfield 1, and Dewsbury 1]; but 16 “residents” who died out of the district have to be added, viz :—Dewsbury Workhouse 4, Dewsbury Infirmary 2, Leeds 2, Manchester 1, Halifax 1, Huddersfield 1, Storthes Hall Asylum 2, Ravensthorpe 1, Goole 1, Yeadon 1. Thus the nett number of deaths belonging to the district was 149, and the corrected death-rate is 12.6 compared with 12.5 for the previous year.

The death-rate for England and Wales is 13.4, and for England and Wales less the 241 towns 12.1.

The deaths registered in the various quarters were 35, 42, 33, and 30.

Forty-nine of the deaths were persons over 65 years of age, the oldest being 92.

All deaths were certified by a doctor or the coroner.

The following table shows the total number of deaths at the various age-periods during the last 5 years :—

	1909	1910	1911	1912	1913
Under 1 year ...	29	26	22	16	21
1 year & under 5 yrs	12	16	16	6	4
5 years „ 15 „	4	10	5	6	12
15 „ „ 25 „	6	5	12	7	2
25 „ „ 65 „	68	47	65	55	61
65 „ and upwards..	55	47	55	58	49
Total ..	174	151	175	148	149

THE INFANTILE MORTALITY.

There were 21 deaths amongst infants, out of 237 births, and 5 of these were due to premature birth. This gives an infantile mortality of 88 per 1,000 births. The infantile mortality for England and Wales was 109, and for England and Wales less the 241 towns, 96.

The Early Notification of Births Act, 1908, has not yet been adopted, although the Council carefully considered the question, and came to the conclusion that it was not at present necessary, seeing that the death-rate has been comparatively low, and that it would be useless to adopt the Act, unless district nurses were appointed.

The infantile mortality for the last 5 years has been :—

Year.	Number of Deaths.	Rate per 1,000 births registered.
1909	29	115
1910	26	114
1911	22	98
1912	16	80
1913	21	88

INFECTIOUS DISEASES.

The total number of cases of infectious diseases notified during the year was 59, viz :—Scarlet Fever 27, Diphtheria 7, Cerebro-Spinal Fever 1, Pulmonary Tuberculosis 11, and other forms of Tuberculosis 13.

Thirty-one of the cases were treated in the Liversedge and Mirfield Joint Infectious Hospital at Crossley, viz :—Scarlet Fever 27, Diphtheria 4.

SCARLET FEVER.

Of the 27 cases notified, 20 occurred in the first half year, and 7 in the second. Eastthorpe ward contributed 9 cases, Battyeford 7, Northorpe 6, and Hopton 5. All were removed to the hospital, and all recovered.

Since my appointment as Medical Officer of Health in March, 1906, there have been 319 cases of Scarlet Fever treated in the hospital, and only 6 deaths, giving a death-rate of only 1·9%.

DIPHTHERIA.

Seven cases of this disease were notified, 4 from Hopton, 2 Eastthorpe, and 1 Northorpe. Four were treated in the hospital, and the other 3 (which were very mild cases) at home. One case was complicated with scarlet fever, and the patient died on the fifth day in hospital.

Sore throats have been prevalent during the year, as a much larger number of bacteriological outfits were used, than positives obtained. It is always possible in bad cases to get result of bacteriological examination telephoned from Wakefield. Antitoxin can be obtained free (when necessary) from the chemists.

ENTERIC FEVER.

No case has been reported this year, neither was there a case in 1912. Mirfield has always been wonderfully clear of typhoid fever, and it might be claimed that this is a fair index of the sanitary condition of the district.

CEREBRO-SPINAL FEVER.

This became a notifiable disease in 1912, and the first case ever known in Mirfield was notified in February, 1913. The onset was very sudden and simulated Influenza and Pneumonia. Lumbar puncture was performed on 7 or 8 occasions, and anti-meningococcic serum injected, but the patient died within six weeks of the onset. It was impossible to discover the source of infection.

No other infectious diseases were notified (except tubercular).

CROSSLEY HOSPITAL.

The porter's lodge has been completed, and occupied for several months.

Alterations have also been carried out in the laundry. No Mirfield cases were in the hospital from June to September, and the hospital was empty altogether, as far as patients were concerned, on two or three occasions during the summer.

An alarming fire occurred at the small-pox block in November, but fortunately (or unfortunately) it was got out, before a great deal

of damage was done. No one was injured, and the damage (estimated at £70) was covered by insurance.

The Christmas festivities were greatly enjoyed by the patients, my colleague Dr. Davis appearing in the garb of Father Christmas, and distributing, to patients and staff, the gifts which had been liberally provided for them.

Notification of Infectious Diseases.

The following table shows the number of cases notified during the last 10 years :—

	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Smallpox ...	70	5	0	0	0	0	0	1	0	0
Scarlet Fever ...	18	202	125	46	24	18	35	41	89	27
Diphtheria & Croup ...	4	7	11	48	23	24	31	6	1	7
Erysipelas ...	2	5	8	8	4	7	2	5	8	0
Typhoid Fever ...	3	4	5	3	2	4	3	6	0	0
Puerperal Fever ...	1	1	1	0	0	3	1	0	0	0
Continued " ...	1	1	0	0	0	0	0	0	0	0
Cerebro-Spinal Fever ...	...	...	...	...	...	...	...	...	..	1
Phthisis, Pulmonary ...	...	...	...	...	...	...	...	1	11	11
„ (other forms) ...	...	...	...	...	...	...	...	...	...	13
Total...	99	225	150	105	53	56	72	60	109	59

The next table shows the number of deaths from zymotic diseases during the last 10 years :—

	* 1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Smallpox ...	—	0	0	0	0	0	0	0	0	0
Scarlet Fever ...	—	6	5	0	0	0	2	0	2	0
Diphtheria & Croup .	—	3	1	9	5	4	3	0	0	1
Erysipelas ...	—	0	0	1	2	1	0	0	1	0
Typhoid Fever ..	—	3	1	0	1	0	0	2	0	0
Puerperal Fever ...	—	1	0	0	0	1	0	0	1	0
Continued Fever ...	—	0	0	0	0	0	0	0	0	0
Cerebro-Spinal Fever	—	—	—	—	—	—	—	—	—	1
Phthisis Pulmonary ...	—	—	—	—	—	—	—	—	4	8
„ (other forms)	—	—	—	—	—	—	—	—	2	5
Measles ...	—	0	4	6	2	0	6	3	0	0
Whooping Cough ..	—	0	5	0	1	1	0	1	1	0
Diarrhœa ...	—	3	8	3	1	0	0	9	1	0
Total...	—	16	24	19	12	7	11	15	12	15

* No record was kept in 1904.

PHTHISIS.

This disease has now been compulsorily notifiable for two years, and eleven cases have been notified each year. Thirteen cases of non-pulmonary tuberculosis have also been notified this year.

The West Riding County Council has provided a free Dispensary, at 16 Ramsden Street, Huddersfield, to which anyone suffering from tuberculosis, and even 'contacts' may go for advice and free treatment. The days and hours of attendance are, Tuesdays and Fridays, 3 p.m. and 7 p.m.

The scheme for the treatment of tuberculosis as submitted by the West Riding County Council seems to me to be a most equitable one. The Insurance Committee pays two-thirds of the total cost in residential institutions; the Government pays one half of the remaining third, and the County Council and the Sanitary Authority pay the remainder in equal proportions. The portion paid by the Sanitary Authority would only be on the basis of user, say about 2/6 per week per case treated from the district.

No Mirfield case has been treated in a sanatorium during the year.

Six pulmonary cases and one non-pulmonary were treated at the Huddersfield Dispensary, and 6 of these received injections of tuberculin. One case was examined, but was referred for domiciliary treatment; whilst two were examined for opinion only; six contacts were also examined; one case was treated with tuberculin at home, and two cases at Leeds.

Six deaths were notified from pulmonary tuberculosis, but only four of these had been notified during the year.

There were three deaths from other tubercular diseases, all of which were notified in 1913.

Pocket sputum vessels might be provided free by the Council, through the doctors.

CANCER.

This disease has again claimed more victims than phthisis, 14 deaths having been registered. It seems to me that early operation, with complete excision of all glands, is still the only hopeful method of cure. Some forms of malignant disease are being cured by radium.

INQUESTS.

Only eight inquests were held during the year. The verdicts brought in by the jury were: suffocation 2, drowning 2, acute dyspepsia, electric shock, heart disease, and glycosuria.

VACCINATION.

Mirfield and Ravensthorpe form one district, and the following are the returns for the year :—vaccinated 208, exempted 167.

SCHOOLS.

Many visits were made to the various schools during the year. School closure was only necessary on one occasion, viz :—at Battysford Infants', in March, on account of an outbreak of mumps. The school was re-opened after the Easter vacation.

Physical exercises are now practised at most of the schools, and children benefit greatly thereby. It is very important that the effect upon the physical development of the child should be watched. Such exercises as are carried out at the Mirfield Grammar School are graduated in such a way, that even those who are known to suffer from heart disease may find certain exercises very beneficial.

County Council of the West Riding of Yorkshire.

EDUCATION DEPARTMENT.

MIRFIELD DISTRICT SUB-COMMITTEE.

DIVISION 25.

*Summary of School Attendance Returns for the Year ended 31st December, 1913.
In the Mirfield Urban District.*

	<i>Average No. of Children on the Registers</i>	<i>Average Attend- ance.</i>	<i>Average No. of Half- Timers.</i>	<i>Percent- age of Average Attend- ance.</i>	<i>Remarks.</i>
January ..	1908	1572	3	82.45	Mumps, Measles & General Sickness.
February ..	1889	1620	3	85.82	Mumps, Measles & General Sickness.
March ..	1896	1593	2	84.06	Mumps, Measles, General Sickness & Influenza
April ..	1918	1677	3	87.50	Mumps & Influenza
May ..	1915	1696	2	88.61	Influenza, Colds & Sore Throats ..
June ..	1909	1724	1	90.33	.. .. .
July ..	1890	1698	1	89.86	.. .. .
August ..	1904	1650	2	86.70	Measles, Mumps & Scarlet Fever ..
September ..	1899	1677	2	88.35	Measles, Mumps & Scarlet Fever ..
October ..	1906	1717	2	90.13	.. .. .
November ..	1895	1632	2	86.16	Influenza, Colds & Sore Throats ..
December ..	1864	1633	3	87.89	Influenza, Colds & Sore Throats, & Measles
Totals ..	1899	1657	2	87.30	

No. of Council Schools.	No. of Non-Provided Schools.	No. of Schools.	No. of Departments.		
			C.	N.P.	Total.
3	6	9	4	10	14

C. FRANCE, *Attendance Officer.*

METEOROLOGY.

J. Watson Kaye, Esq., Cote Wall, has again kindly furnished me with the following particulars :—

Month.	Minimum Tempera- ture.	Maximum Tempera- ture.	Rain.		Month.	Minimum Tempera- ture.	Maximum Tempera- ture.	Rain.	
			No. of Days.	Amount in inches.				No. of Days.	Amount in inches.
Jan. ...	30·24	43·9	23	4·10	July ...	46·9	67·4	10	1·36
Feb. ...	30·12	46·18	15	1·28	Aug. ...	45·25	68·2	12	2·19
Mar. ...	32·2	48·17	24	4·93	Sept. ...	42·0	65·5	15	2·77
April ...	35·10	53·12	17	3·25	Oct. ...	40·14	58·9	15	3·32
May ...	40·1	58·17	14	3·7	Nov. ...	37·7	52·18	24	2·56
June ...	43·4	66·3	10	1·31	Dec. ...	33·6	45·13	15	2·53

Total days of rain 194.

Total rainfall 33·3 inches.

The above totals compare with 214 days and 46·4 inches for the previous year. It seems unsafe to dogmatise on the effects of rain relative to death rates.

FACTORIES AND WORKSHOPS.

All the factories and workshops in the district have been visited at regular intervals, both by myself and the Sanitary Inspector.

No half-timers were certified in Mirfield.

Many defects have been remedied after verbal notices.

All are provided with suitable sanitary conveniences, but at one of the factories greatly improved W.C's. are to be provided.

Smoke nuisance is still often complained of, and less smoke might easily be emitted, if all manufacturers would use the coke stoker.

MILK SUPPLY.

There are 54 cowkeepers in the district, 30 of whom sell milk, and 7 who are purveyors only.

There are 72 cowsheds, and 213 inspection visits have been made. Some of the cowsheds are still badly ventilated, and it is time that farmers realized that fresh air is as good, and as necessary, for the cow as for the human being. It is a fallacy to suppose that overheated dark stuffy byres cause a cow to yield more milk, moreover there is much greater danger of tuberculosis.

Manure heaps are often far too near the dairy.

A case of anthrax was notified at Calf Croft Farm, and the carcase was destroyed in the orthodox fashion.

It is almost ridiculous that Mirfield should possess no less than 21 slaughterhouses, when one public abattoir could better serve the whole district.

The Sanitary Inspector's report and the Local Government Board's Tables are enclosed ; also a special report by the Surveyor on the extension to the sewage works.

In conclusion, gentlemen, I have to thank you all for your kind assistance during the year, and I also acknowledge the great amount of work done by the surveyor and other sanitary officials.

Your obedient servant,

LESLIE J. MILNE,

MEDICAL OFFICER OF HEALTH.

Balgownie House, Mirfield.

24th February, 1914.

Table 1. Vital Statistics of Whole District during 1913 and previous Years.

Name of District —Mirfield.

Year	Population estimated to Middle of each Year.	Births.			Total Deaths registered in the district.		Transferable Deaths.		TOTAL DEATHS REGISTERED IN THE DISTRICT.			
		Un-corrected Number	Nett.		Number.	Rate.	of Non-residents registered in the District.	of Residents not registered in the District.	Under 1 Year of Age.		At all Ages.	
			Number.	Rate.					Number	Rate per 1000 births registered.	Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1908	11126	265		23.8	165	14.8	2	3	19	72	166	14.9
1909	11094	252		22.7	174	15.6	3	8	29	115	179	16.1
1910	11059	219		19.8	147	13.2	3	7	25	114	151	13.6
1911	11712	224		19.1	179	15.2	13	9	22	98	175	14.9
1912	11748	200		17.0	151	12.8	13	10	16	80	148	12.5
1912	11784	237	237	20.1	140	11.9	7	16	21	88	149	12.6

Area of District in acres
(exclusive of area covered by water)

Total population at all ages...
Number of inhabited Houses
Average number of persons per house

3394.
...11,712
... 2,798
4.18

At Census of 1911.

TABLE II.

Cases of Infectious Disease notified during the Year 1913.

Notifiable Disease.	Cases notified in whole District.										Total Cases notified in each locality.				No. of Cases removed to Hospital
	At all Ages.	At Ages—Years.													
		Under 1.	1 & under 5 years.	5 & under 15 years.	15 & under 25 years.	25 & under 45 years.	45 & under 65 years.	65 and upwards.							
Small-pox	0	.....	.....	.....	.....	.....	.....	.....	..	..	..	..	0
Cholera (C) Plague (P)	0	.....	.....	.....	.....	.....	.....	.....	..	..	..	..	0
Diphtheria (including	7	.....	.....	4	3	..	.....	.....	2	4	0	1	4
Membranous Croup)															
Erysipelas...	0	.....	.....	.....	.....	.....	.....	.....	..	..	..	..	0
Scarlet Fever	27	.....	7	18	1	1	.....	.....	9	5	7	6	27
Typhus Fever	0	.....	.....	.....	.....	.....	.....	.....	..	..	..	..	0
Enteric Fever	0	.....	.....	.....	.....	.....	.....	.....	..	..	..	..	0
Relapsing Fever	0	.....	.....	.....	.....	.....	.....	.....	..	..	..	..	0
Continued Fever	0	.....	.....	.....	.....	.....	.....	.....	..	..	..	..	0
Puerperal Fever	0	.....	.....	.....	.....	.....	.....	.....	..	..	..	..	0
Cerebro-spinal Meningitis	1	.....	.....	.....	.....	1	.....	.....	..	..	..	1	0
Poliomyelitis	0	.....	.....	.....	.....	.....	.....	.....	..	..	..	..	0
Pulmonary Tuberculosis...	11	.....	.....	4	.....	4	3	.....	3	3	5	..	3
Other forms of Tuberculosis ...	13	1	2	6	.....	1	3	.....	..	1	6	6	0
Totals	59	1	9	32	4	7	6	.....	14	13	18	14	34	

Isolation Hospital or Hospitals—The Liversedge and Mirfield Joint Infectious Hospital, Crossley.
The Mirfield Memorial Cottage Hospital admits non-pulmonary tubercular diseases.

TABLE III.

Causes of, and Ages at, Death during the Year 1913.

Causes of Death.	Deaths at the subjoined Ages of "Residents" whether occurring in or beyond the District.										Total Deaths whether of "Residents" or "Non-residents" in Public Institutions in the District.
	All ages.	Under 1 year.	1 and under 2.	2 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and up-wards.		
I	2	3	4	5	6	7	8	9	10	11	
All Causes { Certified ... { Uncertified ...	149 0	21 ...	3 ...	1 ...	12 ...	2 ...	22 ...	39 ...	49 ...	14 0	
Enteric Fever ... ..	...	...	...	...	...	...	...	...	...	1
Small-pox ... ..	...	...	...	...	...	...	...	...	...	.....
Measles ... ..	...	...	...	...	...	...	...	...	...	.....
Scarlet fever ... ..	...	...	...	...	...	...	...	...	...	2
Whooping-cough ... ..	...	...	...	...	...	...	...	...	...	.....
Diphtheria and Croup ...	1	...	...	...	1	...	...	...	...	2
Influenza	4	...	...	...	...	1	...	2	1	.....
Erysipelas ... ..	...	...	...	...	1	...	...	...	...	.....
Phthisis (Pulmonary Tuberculosis)	6	...	...	...	1	...	2	3	...	.....
Tuberculous Meningitis ...	2	...	...	...	2	...	...	...	...	.....
Other Tuberculous Diseases	1	1	...	...	...	...	...	...	...	.....
Cancer, malignant disease...	14	...	...	...	...	...	1	6	7	1
Rheumatic Fever ... ..	...	...	...	...	...	...	...	...	...	.....
Meningitis	1	...	...	...	...	...	1	...	...	.....
Organic Heart Disease ...	27	...	...	...	2	...	6	9	10	1
Bronchitis	7	1	...	1	...	...	...	...	5	.....
Pneumonia (all forms) ...	5	1	1	...	1	...	1	...	1	2	
Other diseases of Respiratory organs	1	...	...	...	...	...	1	...	...	1
Diarrhoea and Enteritis ...	...	...	...	...	...	...	...	...	...	.....
Appendicitis and Typhlitis...	2	...	...	...	2	...	...	...	...	1
Cirrhosis of Liver	3	...	...	...	...	...	...	2	1	1
Alcoholism ... ..	...	...	...	...	...	...	...	...	...	.....
Nephritis and Bright's Disease	9	...	...	...	...	...	4	5	...	.....
Puerperal Fever ... ..	...	...	...	...	...	...	...	...	...	.....
Other accidents and diseases of Pregnancy and Parturition	1	...	...	...	...	...	1	...	...	.....
Congenital Debility and Malformation, including Premature Birth	8	8	...	...	...	...	...	...	...	.....
Violent Deaths, excluding Suicide	8	2	...	...	1	1	1	3	...	.....
Suicides ... ..	...	...	...	...	...	...	...	...	...	.....
Other Defined Diseases ...	48	7	2	...	2	...	4	9	24	2	
Diseases ill-defined or unknown ... ..	...	...	...	...	...	...	...	...	...	.....
Totals	149	21	3	1	12	2	22	39	49	14	

Sub-Entries included

in above figures.

Cerebro-Spinal Meningitis—One death, aged 43.

Poliomyelitis—No deaths.

TABLE IV.
MIRFIELD URBAN DISTRICT.
INFANTILE MORTALITY.

1913. Nett Deaths from stated Causes at various Ages
 under One Year of Age.

CAUSE OF DEATH.				Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-3 Months.	3-6 Months.	6-9 Months.	9-12 Months.	Total Deaths under One Year.
All Causes.	{	Certified ..	5	1	2	1	9	4	4	3	1	21	
		Uncertified ...	...	...	..	..	.....	..	..	..	..	0
{	Small-pox	...	...	...	...	.....	...	...	...	...	...	.....
	Chicken-pox	...	...	...	...	.....	...	...	...	...	...	.....
{	Measles	...	...	...	...	.....	...	..	...	...	...	.....
	Scarlet Fever	..	...	...	...	.....	...	...	...	...	...	.....
{	Whooping Cough	...	...	...	...	.....	...	...	...	...	...	.....
	Diphtheria and Croup	...	...	...	...	.....	...	...	...	...	...	.....
{	Erysipelas	...	...	...	...	.....	...	...	...	...	...	.....
	Tuberculous Meningitis	..	...	...	...	.....	...	...	...	...	...	.....
{	Abdominal Tuberculosis	...	...	...	...	.....	...	...	...	...	1	1
	Other Tuberculous Diseases	...	...	...	...	.....	...	...	...	...	...	.....
{	Meningitis (<i>not Tuberculous</i>)	...	...	...	...	.....	...	...	...	...	...	.....
	Convulsions	...	...	...	...	.....	1	...	...	...	...	1
{	Laryngitis	...	...	...	...	.....	...	...	...	...	...	.....
	Bronchitis	...	...	...	...	.....	1	...	...	...	...	1
{	Pneumonia (all forms)	...	...	...	...	.....	...	1	...	...	...	1
	Diarrhoea,	...	...	...	...	.....	...	...	1	...	...	1
{	Enteritis,	...	...	...	...	.....	...	...	...	...	...	.....
	Gastritis,	...	...	...	...	.....	...	...	...	...	...	.....
{	Syphilis	...	...	...	...	.....	...	..	...	...	...	.....
	Rickets	...	...	...	...	.....	...	...	...	...	...	.....
{	Suffocation, overlying	...	...	...	...	.....	...	1	1	...	...	2
	Injury at Birth	...	...	1	...	1	...	..	...	...	...	1
{	Atelectasis	...	1	...	...	1	...	...	...	...	...	1
	Congenital Malformations	...	...	...	...	.....	...	...	...	...	...	.....
{	Premature Birth	...	4	...	1	1	6	1	...	...	..	7
	Atrophy, Debility, & Marasmus	...	...	...	1	...	1	...	...	...	..	1
{	Other Causes	...	...	...	...	.....	1	2	1	...	...	4

Nett BIRTHS in the year

legitimate 228.

illegitimate 9.

Nett DEATHS in the year of

legitimate infants 19.

illegitimate infants 2.

TABLE C., 1913.

MIRFIELD SANITARY DISTRICT.

NOTE.—In order to help towards the systematisation of Annual Reports this Table has been arranged to include most of the headings prescribed by the L.G.B. It is not suggested that the filling up of Table C will actually serve in substitution for the Annual Report, but it will be helpful in many ways if information be given here in addition to dealing with the various headings in the Annual Report. Only very brief entries are desired on this form, but space is provided on the third page for any overflow observations.

——:O:——

WATER SUPPLY—Particulars as to the source and character of the supply should be given in the report.

Any developments during 1913? No.

Any insufficiency, and where? No.

Any curtailment? No. When and for how long?

Did any wells fail, and where? No.

Any unsatisfactory quality, and where? Frequent complaints.

Any unchecked plumbo-solvent action? No.

RIVERS AND STREAMS—So far as pollution is concerned, this matter is under the surveillance of the W.R. Rivers Board, but the M.O.H. is required to note in his Annual Report the presence of pollution and its relation to public health.

DRAINAGE AND SEWERAGE—

Any developments during 1913? Yes. 1576 yards (see report).

Developments still needed as to (a) Want of sewers.

(b) Improvement of defective sewers.

Any inadequacy of Sewage Disposal Works or complaints as to smells? Extension scheme sanctioned by L.G.B.

No. of sink-wastes disconnected during 1913? 11. Trapped? All.

Proportion of sink-wastes still needing disconnection? Many.

Untrapped?

SCAVENGING—

How is refuse disposed of—(a) Destructor? No. (b) Tips? Yes, 5224 loads. (c) Farmers? 1943 loads. Total annual cost, £910 12s. 11d.

NUISANCE INSPECTION

Total No. of Inspections made in 1913? 1784.

Informal Notices served? 136. Complied with? 124.

Statutory Notices served ? 88. Complied with ? 72.
 Total No. of Nuisances in hand at close of 1912 ? 11. At close
 of 1913 ? 28.
 Total No. of Nuisances reported during 1913 ? 164. Abated
 during 1913 ? 136.
 Total No. of Summonses or other legal proceedings ? None.

Regulated Buildings, Trades, &c.	No. in District.	No. on Register	Total No. of Inspections made.	General Condition ?	Legal Proceed- ings.
Common Lodging Houses	None	None	None	—	—
Canal Boats ...	184	317	101	—	—
Knackers Yards ...	None	—	—	—	—
Offensive Trades ...	None	—	—	—	—

Have the Council declared any other processes to be offensive trades, *e.g.*, Fish-frying, Maggot breeding, etc. ? No.

SCHOOLS—Statutory Medical Inspection is carried out by the County Education Authority in most of the Districts, but that does not relieve the M.O.H. of his duties in regard to sanitation and the prevention of infectious outbreaks in connection with Schools.

No. of Elementary Schools in District ? 9
 No. of Visits to Schools ? 17.
 Action taken ? One School closed for mumps.

MILK SUPPLY—

No. of samples taken by Officers of S.A. for analysis under F. & D. Acts ? 18. No. adulterated ? None.
 No. of Samples taken by Officers of S.A. for bacteriological examination ? 2.
 What arrangement for Veterinary Inspection of dairy cows ? None.
 No. of animals notified by Police under Tuberculosis Order, 1913 ? 1.
 Any action thereon by S.A., *e.g.*, to ascertain if cowsheds affected were satisfactory ? Yes.
 Any instance of disease attributed to milk in 1913 ? No.
 No. of Cowkeepers in district ? 54. No. registered ?
 No. of Milk Sellers who are also Cowkeepers ? 30. No. who are
 Purveyors only ? 7. Total No. reg't'd ?
 Total No. of Cowsheds ? 72. No. of Inspections in 1913 ? 213.
 General Condition ? Fair.
 Approx. No. of Milch Cows in District ? 265.
 Any insufficiency in Milk Supply ? No.
 Legal proceedings under D.C.M. Orders. None.
 Any Inspection or other action by Districts to which milk is sent ? No.

OTHER FOODS—

No. of Samples (other than Milk) taken by the Officer of S.A. for examination under the Food and Drugs Acts. None.

No. adulterated. None.

No. of seizures of unsound food. 1.

Kind and quantity. 51 lbs. Fish. No. of Prosecutions. None.

No. of Slaughter houses, 22. No. Registered, 22.

Kind and Condition. Too near dwellings.

No. of Prosecutions—(a) Food and Drugs. None. (b) Unsound Food. None. (c) *re* Slaughter Houses. None.

FACTORIES AND WORKSHOPS.—Please attach the Special Form issued by the Home Office.

Any smoke nuisance, and where? Yes. See Inspector's Report.

No. of Smoke observations taken. 125.

No. of Cautions. None. Legal Notices. None. Summonses. None.

ADOPTIVE ACTS—

Acts adopted during 1913.—Please state parts or sections. None.

Any Urban Powers obtained in 1913? No.

BYELAWS AND REGULATIONS—

Any adopted during 1913.—Please attach copies. No.

Are any other Byelaws needed? No.

INFECTIOUS AND OTHER DISEASES—

What diseases have been specially prevalent in 1913? None.

What special action to combat same? None.

Is Hospital accommodation adequate and sufficient? Yes.

What arrangement for the supply of antitoxin? Free if necessary.

Any diseases specially added to notifiable list? No.

Any influences threatening the health of the District? Cooper Bridge Sewage Works.

SPECIAL REPORTS AND INVESTIGATIONS—Mention any subjects which have been specially investigated and reported on during the year.

Treatment of Tuberculosis.

Uncertified Midwives.

TUBERCULOSIS—Procedure after notification

(1) Inspection of patient's home and workshops. Frequently.

(2) Examination for contacts. Usually.

(3) Disinfection. Yes.

(4) Distribution of advice leaflets.

(5) Action *re* spitting. Leaflets.

(6) Shelters provided. No.

(7) Is sputum examined? Yes.

BACTERIOLOGY—

Is County Laboratory utilized? Yes.
Any suggestions? No.

INFANT MORTALITY—

What organised effort to control it? Leaflets.
Has Notification of Births Act, 1907, been adopted? No.
Is Health Visitor appointed by S.A.? No. By other body?
Yes, for Battysford.
Causes of any excessive Infant Mortality in 1913. None.

VITAL STATISTICS—Please attach the L.G.B. Tables.

BIRTHS during 1913—Males 120. Females 117. Total 237.
No. illegitimate included in above 9.
No. of Still Births (not included) 12.
DEATHS during 1913—(1) Gross Deaths, *i.e.*, Total actually registered
in the District without any correction, 140.
(2) Nett Deaths on which the rates are calculated—
Males 77. Females 72. Total 149.
No. of uncertified deaths (included in above), 0.

MISCELLANEOUS—

Mean Temperature for 1913. 47·1. Rainfall 33·3 inches.
What Mortuary accommodation—
(a) for accidents. Council Offices and Memorial Hospital.
(b) for infectious cases other than at Hospital. None.
No. of Burial Grounds. 8. Any need for extension? No.
Are there any Maggot breeding establishments in District? No.
Any nuisance therefrom or action in relation thereto? No.

SANITARY STAFF—

What is the present Annual Salary of the M.O.H.? £50.

Name of Sanitary Inspector.	Annual Salary as Inspector.	Other appointments held.	Salary for such other appointments.
Job Lee.	£65.	Foreman over scavengers.	£16.

Any Assistants? No.
Is Staff sufficient? Yes.

SUPPLEMENTARY REMARKS as to Sanitary requirements of
District, suggestions of M.O.H., and extended notes from any of
the foregoing entries.

Free baths for the working classes.
Free sputum flasks.
Public Abattoir
Conversion of all privies.

SUMMARY OF HOUSING WORK DURING 1913—Shewing action under Sections 15, 17 and 18 of the Housing, Town Planning, etc., Act, 1909, and the Housing (Inspection of District) Regulations, dated September 2nd, 1910, or matters arising therefrom.

Houses with defects not disposed of at end of 1912—

- Houses not reasonably fit for human habitation. (Section 15). 8.
- Houses totally unfit for human habitation. (Section 17). 2.
- Houses with minor defects (Public Health Acts). 8.
- Houses inspected under the Act and Regulations in 1913. 51.
- Houses found satisfactory on inspection. 20.

Action under Section 15—

- Houses found not reasonably fit for human habitation. 31.
- Houses for which notices were given to execute works. 22.
- Houses in respect of which notices were satisfactorily complied with. 20.
- Houses in respect of which the Local Authority executed or were executing works in default of landlord. None.
- Houses in respect of which landlord elected to close house instead of complying with notices. 2.

Action under P.H. Acts in cases of houses with minor defects not remediable under Section 15, owing to the tenancy having commenced before December 3rd, 1909—

- Houses found with defects. 31.
- Houses made fit after preliminary notice. 29.
- Houses in regard to which notices were served to remedy defects. 31.
- Houses made fit after notice. 5.

Action under Section 17—

- Houses found to be totally unfit for habitation. 2.
- Houses represented to Local Authority as being totally unfit for human habitation. 2.
- Houses made fit for human habitation without the issue of a closing order. None.
- Houses closed voluntarily. 2.
- Houses in respect of which closing orders were made. None.
- Houses closed as unfit for human habitation after closing orders were made. None.
- Houses made fit for human habitation after closing order was made, for which the Local Authority determined the order. None.
- Houses demolished voluntarily. 2.
- Houses for which demolition orders were made. None.
- Houses demolished compulsorily. None,

Appeals—

Appeals against notices under Section 15. None.
 Appeals against closing orders under Section 17. None.
 Appeals under section 17 (6) refusing to determine closing orders.
 None.
 Appeals against demolition orders, Section 18 (2).

Houses with defects not disposed of at end of 1913—

Houses not reasonably fit for human habitation. (Section 15). 2.
 Houses with minor defects. (Public Health Acts). 5.
 Houses totally unfit for human habitation. (Section 17). 1.
 Name and address of Officer designated to make inspections under
 Article II. of Housing (Inspection of District) Regulations, 1910?
 Job Lee. The Council Offices.
 Any regulations made in respect of underground sleeping rooms under
 Sec. 17 (7)? No. Any action in respect of such rooms? None.

OTHER ACTION IN REGARD TO HOUSING—

Any scarcity of houses, if so, where? No.
 Any overcrowding of persons in houses, and where? Battyeferd 5.
 Towngate 1.
 No. of cases of overcrowding dealt with during 1913. 5.
 Any special activity in house building, and where? No.
 No. of new houses built during 1913 (a) Working class dwellings. 40.
 (b) Other 4.
 Any working-class dwellings erected during 1913 by Sanitary
 Authority—Please give number and type :—None.
 Are Sanitary Authority contemplating erection of working class
 dwellings? Please give number and type :—Not at present;
 but question has been considered.

TOWN PLANNING—

Any scheme prepared during 1913? If so, give details. No.
 Any scheme contemplated? If so, for what area? No.

Signed,

LESLIE J. MILNE,

24th February, 1914.

MEDICAL OFFICER OF HEALTH.

*Annual Report of the Medical Officer of Health for the year 1913
for the Urban District of MIRFIELD,*

on the administration of the Factory and Workshop Act, 1901, in connection with
FACTORIES, WORKSHOPS, WORKPLACES and HOMEWORK.

**1.—INSPECTION OF FACTORIES, WORKSHOPS
and WORKPLACES.**

Including Inspections made by Sanitary Inspectors or
Inspectors of Nuisances.

Premises. (1)	Number of		
	Inspections. (2)	Written Notices. (3)	Prosecutions (4)
Factories (Including Factory Laundries.)	160	0	0
Workshops (Including Workshop Laundries.)	210	0	0
Workplaces (Other than Out- workers' premises included in Part 3 of this Report.)	...	...	...
Total	370	0	0

2.—DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.

Particulars. (1)	Number of Defects.			Number of Prosecu- tions. (5)
	Found.	Reme- died.	Referred to H M. Inspector.	
	(2)	(3)	(4)	
<i>Nuisances under the Public Health Acts:— *</i>				
Want of cleanliness	23	23	...	...
Want of ventilation	3	3	...	...
Overcrowding	6	...	...	...
Want of drainage of floors... ..	0	...	...	...
Other nuisances	0	...	...	...
Sanitary accommodation—				
Insufficient	1	(in hand)		..
Unsuitable or defective	1	(in hand)		...
Not separate for sexes	0	...	...	...
<i>Offences under the Factory and Workshop Act :—</i>				
Illegal occupation of underground bakehouse (s. 101)	0	...	...	...
Breach of special sanitary require- ments for bakehouses (ss. 97 to 100)	0	...	..	..
Other offences (Excluding offences relating to outwork which are included in Part 3 of this report)	0	...	...	...
Total	34	26	0	0

* Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act, as remediable under the Public Health Acts.

3.—HOME WORK. None.

4.—REGISTERED WORKSHOPS. None.

5.—OTHER MATTERS. Nil.

LESLIE J. MILNE,
Medical Officer of Health.

24th February, 1914.

SANITARY INSPECTOR'S REPORT.

MIRFIELD URBAN DISTRICT COUNCIL, DEC. 31st, 1913.

TO DR. LESLIE J. MILNE, MEDICAL OFFICER OF HEALTH FOR THE
URBAN SANITARY DISTRICT OF MIRFIELD.

DEAR SIR,

(1) I have pleasure in presenting my 10th Annual Report of the work accomplished in your Health Department during the year ended December 31st, 1913.

(2) **Cowsheds**—There are 60 Cowsheds within the district, 53 of which are in use. I have made 213 visits to these during the year, and have found them to be in a generally fairly clean condition. I have submitted 18 samples of Milk to the Public Analyst, who certified 15 of them to be genuine and 3 of poor quality. I have submitted 2 samples of Water to Dr. Kaye, County Medical Officer.

(3) **Slaughterhouses**—There are 22 Slaughterhouses within the district, 16 used weekly, and the remainder only occasionally. 41 visits have been made, and the bye-laws relating to cleansing of blood garbage, &c., have been complied with.

(4) **Workshops**—There are 34 Non-Textile Factories, 32 occupied and 2 unoccupied. 74 Workshops including Bakehouses within the district. I have made 160 visits to these places during the year, and in 23 cases want of cleanliness was found and the necessary cleansing was done in consequence of verbal notice. The others comply with the regulations and have been kept in a cleanly state.

(5) **Fried Fish Shops**—There are 16 occupied and 1 unoccupied within the district, and all have been kept systematically under inspection at irregular intervals. I have no complaint to make respecting any of these premises or of the quality of the fish prepared and offered for sale thereat. The proprietor of one of these shops reported and surrendered for destruction 51 lbs. of fish which was delivered to him by rail in an unsound condition.

(6) **Van Dwellings**—Attention has been paid as in previous years to the Van Dwellings of persons attending the Spring and Autumn Feasts for the purpose of discovering the existence of any nuisance or Infectious Disease. The Vans were generally very clean and the inmates appeared to be in a healthy condition.

(7) **Other Sanitary Work.**—The following list records the work accomplished under this heading. During the year 159 nuisances were reported. 136 were abated, 6 from last year, and the balance is still being dealt with.

(8) **Smoke Observations**—The following table shows the number of observations taken, the names of the firms, and the average number of minutes of black smoke emitted per hour by each chimney whilst under observation.

Name of Firm.	Address.	No. of Observations taken for a period of 60 minutes.	No. of Minutes of Smoke emitted per hour.	
			Dense.	Moderate
Coloured Cotton Co. ...	Britannia Mill... ..	6	8½	3½
Wilkinson & Akeroyd...	Perseverance Works ...	7	10	3
Geo. Lyles & Sons ...	Ledgard Bridge Mill ...	7	8	8½
Wilson & Ingham ...	Southbrook Mill ...	7	3½	2½
Kilner Bros.	Fold Head Mill ...	11	10¼	3
James Walker & Sons...	Holme Bank Mill ..	7	4¼	4½
James Walker & Sons...	Butt End Mill... ..	11	11	4
J. F. & J. Crowther, Ltd.	Station Road	6	4	2
Henry Wheatley & Sons	Hopton Mill	6	4½	3½
Bruce & Nephew	Clive Mill	9	5¼	3
Joseph Barrowclough...	Bank Field Mill ...	9	4½	6¾
Lister Bros.	Wellington Mill ..	9	7¼	3½
Mirfield Coal Co. ...	King's Head Pit ...	7	5	3
Garforth Bros.... ..	Taylor Hall Brick Wks.	7	4¼	3½
Henry Walker & Sons	Sands Mill	4	1	1½
Popplewell Bros. ...	West Mill Oil Works ...	5	3	2
W. Kenworthy & Co....	Nun Brook Print Works	4	2¼	1

(8) **Housing**—The number of houses thoroughly inspected under the Housing and Town Planning Act, 1909, during the year is 39. Defects existed in the greater portion of the houses inspected. Owners on receipt of preliminary notice are complying with the requirements. The following table gives in detail the defects found in the dwellinghouses inspected.

DEFAULT OF THE OCCUPIERS.

No. of dirty houses	{	floors	...	...	...	6
		walls	...	...	...	3
		ceilings	...	...	...	8

DEFAULT OF THE OWNERS.

No. of damp houses	{	ceilings	...	...	...	16
		walls	...	...	...	18
		floors	...	...	...	9
No. of houses with		defective walls	...	...	...	14
"	"	defective ceilings	...	...	...	12
"	"	badly ventilated rooms	...	...	...	22
"	"	defective slopstones	...	...	...	12
"	"	defective drains	...	...	...	16
"	"	defective rainwater pipes	..			5
"	"	eaves trough	...	...	...	4
"	"	leaking roofs	...	...	...	18
"	"	cellars without flags	..	...	...	11
"	"	without proper food store	...	...	...	14
"	"	with badly lighted rooms	...	...	...	2
"	"	defective floors	...	...	...	11
"	"	leaking guttering	...	...	...	7

(9) **Canal Boats**—In accordance with the provisions of Sec. 3 of the Canal Boats' Act, 1884. I beg to submit the following Report of my Inspections of Canal Boats. 101 visits have been made by me for this purpose during the above period and 112 boats were inspected, 111 of the boats possessed a certificate, and 1 was without. 7 Cabins requiring repainting or varnishing. All complied with notice within time specified.

There was no overcrowding.

No separation of the sexes is required.

Cleanliness well attended to.

Ventilation sufficient.

The Boats were in good condition with respect to painting and repairs.

Each Boat was provided with a water cask or jug.

In each case the bilge water was removed as required.

No Notification of Infectious Disease.

No objection to admittance of Inspector.

No. of Boats on Register 317.

No. in use or available 183.

No. on Register but done away with 80.

No. registered with other authority 27.

No. of Boats that cannot be traced 26.

No. registered in 1913 2.

Certificates corrected transferring ownership 6.

New Copies of Registration 4.

(10) **Refuse Removal**—The following shows the quantity of refuse removed during the year, and for comparison the preceding year's returns are also given :—

1912	...	7151	Loads cost	£849 8s. 8d.
1913	...	7167	,, ,,	£911 8s. 4d.

There is an increased cost of scavenging of £61 19s. 8d. over last year, but the rise in the Team Labour and the increase of Men's Wages account for £56 3s. od., and for six months the Hopton Quarry Tip has been closed so that the refuse from the Hopton Side has now to be carted and tipped in Taylor Hall Lane Quarry.

Refuse Collection and Disposal.

				£	s.	D.
Team Labour	...	...	...	539	5	11
Manual Labour	...	...	...	309	13	11
Cost of Tipping	...	...	...	62	14	0
Disinfectants	...	...	...	11	5	0
Cart Covers	...	...	...	3	7	6
				<hr/>		
Total cost for year	...	...	...	£926	6	4
Less for removal of Trade waste				14	18	0
				<hr/>		
				£911	8	4

Generally the sanitary conditions of the district are good, and it is a great pity that the ratepayers do not realise the great assistance they could render in maintaining, if not improving, the health of the district at no cost, and scarcely any effort to themselves, by destroying vegetable and other matter, which might become objectionable. Keeping the sink gullies clean, using the sink drain for slops instead of the street gullies, and keeping the areas about dwellings free from litter and dilapidated and unsightly huts, as untidy surroundings cannot have a beneficial influence on the minds of adults, and especially children. Parents ought to realize that the child plays an important part in years to come, and it is their duty to do all they possibly can, in keeping the surroundings healthy, and as bright and cheerful as possible.

(12) Summary of Visits, Inspections, &c. :—

House to house Inspection...	...	...	...	39
Non-Textile Factories	...	...	...	34
Workshops	...	...	...	128
Fish and chip shops	...	...	...	32
Bakehouses	...	...	...	32
Slaughter-houses	...	...	...	41
Van dwellings	...	...	...	16
Cow sheds	...	...	...	213
Samples of milk	...	...	...	18
Samples of water	...	...	...	2
Distributed leaflets—Preservatives in milk			...	59
Celluloid warnings sent out	...	..	...	28
Smoke observations	...	...	...	125

Canal Boats	101
do. measured for registration	2
do. ownership transferred	6
New copies of registration supplied	4
Notices sent to limewash	111
Verbal notices	25
Other notices	88
Letters	61

Nuisances Abated.

Privies converted into water closets	42
Additional water closets built to old property	13
Water closets for new property	44
Ventilation shafts fixed	42
Access chambers built	24
Ash bins	33
Tipper closets cleaned and repaired	9
Privies and ashpits built	3
Privies and ashpits repaired	10
New closet pans	3
New flush tanks	3
Drains tested with colour	57
Drains and gullies cleaned	44
Old property drained in sewer	22
Sink pipes put in	11
Inspection to new drains	122
Inspections to work in progress	92
Visits to meet owners—re nuisances	14
Nuisances reported	159
Nuisances abated (6 from last year)	136
Houses stoved and fumigated	41
Beddings and mattress destroyed	6
Eaves rainwater spouts fixed	17
Overcrowding	6
Accumulation of Manure	5

I am, Dear Sir,

Yours obediently,

JOB LEE,

INSPECTOR OF NUISANCES.

COUNCIL OFFICES,

MIRFIELD,

JANUARY 30th, 1913.

**PROPOSED SETTLING TANKS, SLUDGE DRAINERS, &c.,
AT THE SEWAGE FARM NORTHORPE.**

**Report submitted to the Inspector at the Local
Government Inquiry.**

Before entering upon the details of the proposed works perhaps a few particulars of the existing works might be interesting.

The total area of the district is about 3,400 acres, and forms part of two watersheds, the Spen Valley and the Calder Valley. The Sewage from an area of 1,110 acres, with a population of 3,136, gravitates to the farm which is situated in the Spen Valley, and the sewage from the remaining area, with a population of 8,612, gravitates to the pumping station at Shepley Bridge, after which it has to be pumped through 706 feet of 12 inch rising main to the main outfall sewer in Church Lane. The difference in level between the bottom of the pumpwell and the delivery outlet is 60 feet.

When the sewage arrives at the Farm it is turned on to the land direct without any preliminary treatment, and with the ever increasing quantity of solids the land is becoming "Sewage Sick"; hence the necessity for the proposed works.

The area of the Farm is $34\frac{1}{2}$ acres, $27\frac{3}{4}$ acres are laid out for treating the sewage, $15\frac{1}{4}$ acres for Broad Irrigation, and $12\frac{1}{2}$ acres for Intermittent Downward Filtration, the remaining area is taken up by roads and embankments or is at too high a level. The area laid out for sewage allows one acre for 423 persons, or 2.36 acres per 1,000.

The population of Mirfield is 11,748, and from careful gaugings (readings taken every 15 minutes) taken over 7 days from July 28th to August 3rd, 1911, the discharge was 1,179,352 gallons, 881,500 gallons from the pumping area and 297,852 gallons from the gravitation area, or 125,928 gallons per day from the pumping area and 42,551 gallons per day from the gravitation area, or a combined volume of 168,479 gallons per day which gives a discharge of 14.5 gallons per person per day.

The gaugings were taken during a dry period, no rain having fallen for about a month before commencing to take the readings, and for the purpose of my calculations I have assumed that the whole of the discharge was sewage.

In designing the works I have based my calculations on a dry weather flow of 200,000 gallons in 24 hours made up as follows:—

Dry Weather Flow	...	...	170,000 gallons.
Conversion of Privies into W.Cs.		14,000	„
Allow for connection of new and existing property	...	...	16,000 „
			<hr/> 200,000 gallons per day. <hr/>

140,000 gallons to be pumped and 60,000 gallons from the gravitation area.

Assuming that two-thirds of the volume is discharged in 12 hours the basis of calculation in determining the size of the Tanks. &c. would be two-thirds of 200,000 gallons—133,333 gallons—93,333 gallons from the pumping area, 40,000 gallons from the gravitation area, 7,777 gallons per hour from the pump, and 3,333 gallons per hour from the gravitation area.

Total discharge	...	...	200,000 gallons D.W.F. per day.
$\frac{2}{3}$ discharge in 12 hours	...	133,333	„ „
Discharge in 1 hour	...	11,111	„ „ average.

So that provision has to be made for dealing with 11,111 \times 6 times D.W.F. = 66,666 gallons per hour.

THE PROPOSED WORKS CONSIST OF:—

Screening Channel.
 Detritus Tanks (in duplicate).
 Gauge Channels.
 Settling Tanks (4 in number).
 Storm Water Tanks (3 in number).
 Sludge Drainers (4 in number).
 Carriers, Manholes, &c.
 Manager's Cottage.
 Implement Shed.

Screening Channel.—After the sewage leaves the outfall sewer it will pass through coarse screens which are arranged in duplicate so that either can be thrown out of action for cleaning purposes.

Detritus Tank.—There are two tanks each 20 feet \times 8 feet \times 2 feet 9 inch average depth with a total capacity of 5,500 gallons. Either tank can be thrown out of action for cleaning purposes, valves being fixed for drawing off the supernatant water and the sludge.

I have provided a channel between the two Tanks so as to be able to pass the sewage from the gravitation area direct to the settling tanks, because when the pumps are not working the volume from this area is very small and if passed through the detritus tanks settlement would take place.

Gauge Channel.—After the sewage has passed through the detritus tanks it enters a primary channel with an orifice fixed at the end to pass a volume equal to three times the dry weather flow. When the volume exceeds that quantity the excess overflows over a weir 12 feet long into a secondary channel of similar design, all above 6 times passes to the Spen Beck untreated with the exception of having passed through the screens and Detritus Tanks.

The designing of a satisfactory Gauge Channel on a pumping scheme is very difficult, and in this case it is all the more difficult owing to part of the sewage gravitating to the works and the remainder having to be pumped, and the volumes from the two areas joining one common outfall before arriving at the works.

The average volume to be passed to the tanks during a storm is 33,333 gallons per hour, made up of 11,111 gallons sewage, and 22,222 gallons of storm water, but the delivery from the pump is the same whether pumping sewage or storm water, and unless some provision is made in the primary channel to allow the volume to pass which will be in excess of the volume allowed to pass the orifice the overflow weir will come into operation when the pumps are pumping the dry weather flow.

To overcome the difficulty I am suggesting fixing a second orifice in the primary channel which will “by pass” the volume from the pump in excess of the volume fixed by the first orifice and that the Farm Manager be allowed to close down the second orifice when he considers the pump has discharged the dry weather flow in time of storm. The orifices in the gauge channels are set to pass 6.8 times the dry weather flow, the orifice in the primary channel will pass 33,250 gallons per hour, and the orifice in the secondary channel will pass 42,180 gallons per hour. There is in addition in the primary channel the “by-pass” orifice which will pass 15,250 gallons per hour.

NOTE—In sanctioning the scheme the L.G.B. determined the volume to pass the fixed orifice at 35,000 gallons, and sanctioned the “by pass” orifice the volume to be 15,000 gallons, and that the whole of the storm water must pass through the storm water tanks. The weir from the primary channel to the storm water channel is now increased to 30 feet long to keep the head of water as low as possible.

Settling Tanks.—The Tanks will be four in number with a total capacity of 219,000 gallons. The design is an approved principle for assisting precipitation, and by means of a centre channel and with sluices and valves any one of the tanks may be cleansed without disturbing the operation of the others. They will be worked in one unit on the continuous flow settlement principle, and when the volume is small, one or more will be cut out to pass the reduced volume through at a quicker rate. The supernatant water will also be drawn slowly from the Tanks not in action, this will assist in getting a more uniform discharge on to the land.

When any of the tanks require emptying the supernatant water will be run into the tank effluent drains and passed on to the land, and the sludge will be drawn off by a valve at the bottom of the tanks and discharged on to the sludge drainers.

The Tanks will be rectangular in shape 72 feet long \times 23 feet wide and an average depth of 5 feet 3 inches. The floors and walls will be of cement concrete finished smooth. Above the water line the walls will be lined with salt glazed bricks and finished with a bull nose coping, outside the coping there will be a path 4 feet wide of asphalt.

Storm Water Tanks.—The Storm Water Tanks will be three in number and of the rectangular type; each tank will be 50 feet \times 16 feet \times 4 feet 6 inch average depth, the capacity will be 69,000 gallons or about $\frac{1}{3}$ of the dry weather flow.

The tanks will be used as one unit but they are so designed that with Channels, Valves, and Sluices, any one of them can be cleansed without disturbing the operation of the other two. The emptying is in every way similar to the settling tanks.

The construction and finish is similar to the settling tanks.

Sludge.—The Sludge Drainers will be constructed on one of the low lying beds near No 1 effluent outfall so that the sludge will gravitate from the tanks.

There will be four drainers each with a capacity to receive the sludge from one settling tank and one storm water tank.

They are designed upon a most approved principle for draining the water from the sludge.

The sides are formed of cement concrete, and a channel is formed in the centre of the floor for collecting the effluent. The filtering medium consists of hand packed rubble averaging 8 inch thick, on the top of which is laid 9 inch of screened ashes graded from $2\frac{1}{2}$ inch to $\frac{1}{4}$ inch.

The effluent from the collecting channels will discharge into a distributing drain and finally be treated on the land. The sludge will be allowed to remain on the drainers until sufficiently stiff to be thrown into carts with shovels.

From enquiries I have made there will be a good demand for the sludge amongst the farmers in the neighbourhood of the farm, and the Council can also dispose of about 120 loads a year on the high land.

The collecting drains will be of salt glazed fireclay pipes jointed with cement.

The channels will be formed of cement concrete in the bottom and the sides will be of salt glazed bricks walled in cement mortar and finished with bull nose bricks.

The manholes will be of selected bricks walled in cement mortar and the bottoms will be formed of cement concrete and invert pipes.

The works are designed on as high ground as the outfall sewer will admit, and without breaking into the farm, and no fall has been lost. The works can be extended at any future time.

Tool House and Shed.—It is proposed to erect a tool house and shed for storing tools and implements, and for feeding the horses working on the farm. The building will be of brick covered with slates.

Farm Manager's Cottage.—It is also proposed to build a cottage for the man in charge of the works, so that he can be near to control valves, sluices, &c., according to variation in the volume of sewage.

The house will be of brick with rough cast above the chamber floor, and covered with slates.

On the ground floor there is a living kitchen, parlour, scullery, pantry, coal place, and W.C., on the first floor there are three bedrooms and a bathroom.

EDWIN GILL,

January 30th, 1913.

ENGINEER.

